

JANUARY 2016

## The lure of big cities for the highly educated

*Edith S. Baker*

It is well known among economists and other social scientists that large cities have disproportionately large shares of highly educated workers, and the trend has been growing in recent decades. The correlation between city size and education is also well known. But what draws educated workers to large cities? Economists have found two kinds of relative advantages that big cities offer to the more highly educated: “production amenities”—that is, gains in productivity, which translate into higher wages; and “consumption amenities”—both natural benefits, such as good weather and scenic beauty, and endogenous benefits, such as a sophisticated transportation infrastructure, first-class restaurants, and a greater variety of goods and services. In an article titled “[Big cities and the highly educated: what’s the connection?](#)” (Federal Reserve Bank of Philadelphia *Business Review*, third quarter 2015), Jeffrey C. Brinkman seeks to learn which of these two factors is more influential in attracting educated workers to large cities. As might be expected, the answer he finds is nuanced and could affect local policymakers’ decisions.

Production amenities are greater in large cities. Economists often attribute this increase in productivity to what they call *agglomeration externalities*: gains in efficiency achieved because high concentrations of workers, customers, suppliers, and even rival firms coexist in a given city. These gains are, of course, reflected in higher wages, but extend as well to technological advantages, including greater prospects of innovation through the spillover of knowledge from firm to firm and industry to industry. Thus, it is not surprising that highly educated workers, especially those working in research and development, are attracted to the production amenities of large cities. Indeed, researchers have established two important links: that between having a college education and choosing to live in a big city and that between earning a higher wage and choosing to live in a big city. Moreover, the greater the percentage and the higher the wage premium of those with a college education, the bigger is the city in which they live. Brinkman points out that these wage effects attract highly educated workers to large cities. He also presents research results which show that production amenities play the chief role in attracting highly educated workers to large cities for the following reasons: (1) wages of college graduates grow faster with city size than do wages of those without college degrees; (2) highly educated workers adapt more readily to new technologies and thus are better able than less educated workers to thrive in large cities, where those technologies are more available; and (3) agglomeration externalities are stronger for high-tech industries, high-skilled manufacturing industries, and finance industries, all of which often require a college education. Moreover, these reasons prevail even more in big cities.

But cities are increasingly also being valued for their consumption amenities. Brinkman cites two papers that compared incomes in a given location with the cost of living in that location (which is the standard way economists measure the amenity value for a city). One found a slight positive correlation between city size and amenity value; the other showed that high-amenity cities grew fast in recent decades. Thus, both papers appear to establish a positive relationship between city size and consumption amenities. The question remains, then: How do people in different income groups (a proxy for education) value the consumption amenities that large cities offer? To answer this question, Brinkman cites two more papers which suggest that workers with higher incomes (and hence, by proxy, more education) place a higher value than do low-income workers (and hence, by proxy, those with less

education) on the consumption amenities of large cities because of the greater variety and quality of the products those cities provide. In other words, workers *self-sort* into large cities with more consumption amenities according to their income (and hence, by proxy, education) levels.

In sum, although production amenities remain the chief reason that highly educated workers seek to live in big cities, the consumption amenities of those cities are being increasingly valued by those same workers. This increased interest, argues Brinkman, should spur policymakers to invest in such amenities as parks and museums because, even though these kinds of amenities have no direct effect on productivity, people are valuing them more and more in the large cities they move into—and they may even forgo higher wages as long as the city has those amenities.